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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,678	04/10/2001	Tadayuki Suzuki	0425-0821P	3254

2292 7590 12/02/2005

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EXAMINER
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PRYOR, ALTON NATHANIEL

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/744,678	<b>Applicant(s)</b> SUZUKI ET AL.	
	<b>Examiner</b> Alton N. Pryor	<b>Art Unit</b> 1616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1,7,8,13-20 and 27-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 30 is/are allowed.
- 6) ☐ Claim(s) 1,7,8,14-20,27-29 and 31-34 is/are rejected.
- 7) ☐ Claim(s) 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's arguments, see paper, filed 9/16/05, with respect to claims have been fully considered and are persuasive. The rejections of record have been withdrawn.

- I. Rejection of claims 16,31-33 under 35 USC 112, 2<sup>nd</sup> paragraph will not be maintained. Applicant has made it clear to the examiner that the glycoside is not the sugar / sugar alcohol.
- II. Rejection of claims 7,8,27,28, and 30 under 35 USC 103(a) as being obvious over McArdle and Brantley on record will not be maintained. McArdle describes the protein-polysaccharide as a complex rather than the actual formation of a glycoside bond linkage.
- III. Claims 1,13-15,17-20,29,34 are no longer allowable in view of new art rejections set forth below.

Applicant's arguments with respect to claims in office action dated 6/16/05 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1,7,8,14-16,18,19,27-29,31,34 rejected under 35 U.S.C. 103(a) as being unpatentable over Nonomura et al (US 5958104; 9/28/99), JP 5111032; 9/29/76, and JP 63033310; 2/13/98). Nonomura teaches a composition comprising 0.05 to 25 wt. % C1 to C7 alkyl glucoside (A). See abstract, column 4 lines 3-57, column 5 lines 47-51. Nonomura teaches the addition of ethanol (preservative - F), sugar - B, water (column 2 lines 47-61), fungicides - F, brassinolides - C, gibberellins - C (see column 7 lines 9-30) to the composition. Nonomura teaches that the composition is applied to plants to enhance their growth. See abstract, column 1 lines 34-59, column 4 line 58 – column 5 line 62. Nonomura does not teach the invention comprising: 1) instant amounts of brassinolides or gibberellins; 2) calcium compound; 3) fungicide; and 4) saccharide. It would have been obvious to one having ordinary skill in the art to determine the optimum amount of brassinolides or gibberellins. One would have been motivated to do this in order to determine the most effective and least toxic composition for promoting plant growth. JP '032 teaches an agricultural composition for the promoting plant growth comprising calcium cyanamide (aggregating agent – D) and hydroxy-5-methyl-isooxazole (fungicide - F) . See abstract. It would have been obvious to one having ordinary skill in the art to modify the invention taught by Nonomura to include the cyanamide and hydrox-5-methyl-isooxazole taught by JP '032. One would have been motivated to do this since Nonomura suggests the addition of fungicides to his invention. See Nonomura's column 7 lines 9-30. Such addition would kill fungi which would impede plant growth. The modified Nonomura-JP

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'032 invention comprising 0.05 to 25 wt. % C1 to C7 alkyl glucoside, ethanol (preservative), sugar, water, fungicides, brassinolides, gibberellins (see column 7 lines 9-30), cyanamide and hydrox-5-methyl-isooxazole does not comprise a saccharide. However JP '310 teaches a plant growth promoting composition comprising oligosaccharide, gibberellin, brassinolide, and fungicides. JP '310 teaches that the composition promotes plant growth at the root. See abstract. It would have been obvious to further modify the invention of Nonomura-JP '032 to include the oligosaccharide taught by JP '310. One would have been motivated to do this in order to promote the growth of the plant at the root.

Claims 1,7,15,17-20,27-29,32,33,34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai et al (JP 02209801; 08/21/90). Sakai teaches a plant growth-regulating composition comprising brassinosteroids (C - plant hormone), polyoxyethylene sorbitan fatty acid (A - structure has polyglycoside ester linkage) , and isopropanol (F - preservative). Sakai teaches that the composition is applied to cucumber plants to promote their growth. See abstract. Sakai does not teach an invention comprising the instant amounts / ratios of brassinosteroids, polyoxyethylene sorbitan fatty acid, and isopropanol. However, it would have been obvious to one having ordinary skill in the art to determine the optimum amounts and ratios. One would have been motivated to do this in order to make an invention that would have been most effective and least toxic in promoting plant growth.

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***Claim Objection / Allowable Subject Matter***

Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach or suggest the instant invention comprising the compounds of claim 13. Claim 30 is allowable. The prior art does not suggest the instant invention; wherein, the hydrophobic group is bound via an amide linkage to the sugar or sugar alcohol.

***Telephonic Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Alton Pryor', with a stylized, cursive script.

Alton Pryor  
Primary Examiner  
AU 1616